

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

**SUZUKI *et al.***

Application No. 10/059,145

Filed: January 31, 2002

For: TV OBSERVATION SYSTEM  
FOR ENDOSCOPES

Art Unit: 2613

**Confirmation No. 7654**

Examiner: Y. Young LEE

Atty. Docket No. 54240-215135

Customer No.

**26694**

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This paper is presented in response to the Examiner's Answer of April 7, 2005.

## **I. STATUS OF CLAIMS**

Claims 1-53 are canceled; claims 59, 60, 66, 67 and 71-78 are withdrawn from consideration and claims 54-58, 61-65 and 68-70 stand rejected under the final Official Action of June 22, 2004, from which this appeal is taken.

## **II. GROUNDS OF REJECTION**

In the June 22, 2004 Final Office Action, claims 54-55, 57-58, 61, 63-65 and 68-70 were rejected under 35 U.S.C. §102(b) based on Hiyama *et al.* (U.S. Pat. No. 5,436,655) (hereinafter "Hiyama *et al.*"). Claims 56 and 62 were rejected under 35 U.S.C. §103(a) based on Hiyama *et al.* Claims 1-53 have been canceled and claims 59-60, 66-67 and 71-78 have been withdrawn from consideration as being directed to a non-elected invention.

Thus, the grounds of rejection to be reviewed on appeal are:

- 1) whether claims 54-55, 57-58, 61, 63-65 and 68-70 are anticipated under 35 U.S.C. §102(b) based on Hiyama *et al.*; and
- 2) whether claims 56 and 62 are obvious under 35 U.S.C. § 103(a) based on Hiyama *et al.*

### **III. SUBSTITUTE APPEAL BRIEF FILED CONCURRENTLY**

#### ***A. Correction of Informalities***

Appellant has submitted a Substitute Brief on Appeal to replace the original Brief on Appeal in order to correct informalities. Appellant has corrected the statement of Real Party in Interest to clarify that Olympus Optical Company, Ltd. has changed its name to Olympus Corporation. Appellant has revised the statement of Related Appeals and Interferences to cite the current chain of applications and the chain of applications that led to the Hiyama et al. reference cited by the Examiner, which is co-owned by the assignee of the current application. The section on the status of the claims is revised to specify the status of all claims including canceled claims, claims withdrawn from consideration, and the claims on appeal. Appellant has revised the section titled "Status of Amendments," which is for providing a statement of the status of any amendment filed subsequent to a final rejection, to clarify that there are no amendments in this case subsequent to the final rejection upon which this appeal is taken. Appellant has revised the section regarding the "Summary of the Claimed Subject Matter" to include reference numerals in addition to references to figures, pages and line numbers. Appellant has revised the section entitled "Grounds of Rejection to be Reviewed on Appeal" to correct inadvertent clerical errors. The original arguments have not been changed.

#### ***B. Grouping of Claims Under the New Rules***

The Examiner indicated that the rejection of claims 54-58, 61-65 and 68-70 stand or fall together because Appellants brief did not include a statement of the grouping of the claims. The Examiner cited 37 CFR § 1.192(c)(7). Appellant respectfully submits that old Rule 192 does not apply to this appeal and that the new rules for appeals to the

Board effective September 13, 2004 apply to this case. The new Board Rules do not require a statement of the grouping of the claims. Instead, 37 CFR § 41.37(c)(1)(vii) indicates that each ground of rejection must be treated under a separate heading. For each ground of rejection applying to two or more claims, the claims may be argued separately or as a group. Any claim argued separately should be placed under a subheading identifying the claim by number. Claims argued as a group should be placed under a subheading identifying the claims by number. It is thus the structure of the headings and subheadings that determine the grouping, if any, of the claims. Since the original brief on appeal placed each claim under its own subheading, Appellant respectfully submits that each claim stands or falls on its own and no claim under appeal has been grouped with one or more other claims.

#### **IV. ARGUMENT**

Appellant maintains all arguments in the original brief on appeal which are again incorporated unchanged in the Substitute Brief on Appeal. The following sections address in detail what Appellant views as major flaws in the Examiner's Answer. The fact that this Reply does not address every point in the Examiner's Answer, is not an indication that Appellant has conceded any of those points.

##### ***A. The Examiner Has Not Identified Structure That He Considers to Be the TV Camera in Hiyama et al.***

The Examiner argued that Hiyama et al. discloses a TV camera upon which the claims on appeal read. However, the Examiner has never specified, throughout the entire prosecution of this case, including the Answer, what structures in the Hiyama et al. reference he considers to be such a TV camera. Although the Examiner cites reference

numerals for other components, he did not cite a reference numeral for the TV camera. On page 3 of the Answer, the Examiner argued that Hiyama et al. discloses a TV camera that has "an image pickup element 237". First, Hiyama et al. discloses a signal processing circuit 237, not an image pickup element 237. Furthermore, this is not sufficient to clarify what the Examiner considers to be the TV camera disclosed in Hiyama et al. In the paragraph spanning pages 5 and 6 of the Answer, the Examiner concedes that the Hiyama et al. reference, other than column 74, lines 67 – column 75, line 5 fails to disclose a TV camera. In particular, the Examiner concedes that "although Hiyama et al. discloses various optical system elements such as a CCD 232, it does not illustrate any detailed connections of a TV camera." However, as noted in the initial Appeal Brief, column 74, lines 67 – column 75, line 5 of Hiyama et al. merely suggests that a TV camera can be used without disclosing any specific structure or its interconnection with other components of the system. This still leaves it unclear as to what the Examiner considers to be a disclosure of a TV camera in Hiyama et al. upon which the claims on appeal could be read. Appellant respectfully submits there is no disclosure of a TV camera that meets all of the limitations of the claims on appeal that recite a TV camera.

***B. The Signal Processing Circuit 237 of Hiyama et al.  
Is Not the Recited Image Pickup Element***

On page 3 of the Answer, the Examiner argues that "the TV camera of Hiyama et al. has an image pickup element 237." Appellants respectfully submit that this is a misinterpretation of the Hiyama et al. reference. Hiyama et al. clearly specifies that element 237 is a signal processing circuit. This is illustrated in several drawings, such as FIG. 13. Hiyama et al. states that the "CCD 232 is connected to a signal connector 235 of

the connector 211 through a signal cable 234, and is connected to a signal processing circuit 237 and a distance computing circuit 238 through a signal connector receptor 236 to which the signal connector 235 is connected." (Col. 21, line 67 – col. 22, line 4). The CCD 232 is an image pickup element (col. 21, lines 61-62). Therefore, the Examiner's interpretation that the signal processing circuit 237 of Hiyama et al. is an image pickup element, is an improper interpretation of the disclosure of Hiyama et al.

***C. Signal Connector 235 of Hiyama et al.  
Is Not the Recited Eyepiece Section***

On page 3 of the Answer, the Examiner argued that "the TV camera is connected to the eyepiece section 235" of Hiyama et al. As noted above, the Examiner does not specify what he considers to be the disclosed TV camera. On page 4 of the Answer, the Examiner addressed Appellant's argument that signal connector 235 of Hiyama et al. is not the recited eyepiece section. In particular, the Examiner stated that "it is submitted the description for such unit can only be found on page 5, line 3 ... and page 9, line 17 of the Specification." The Examiner goes on to state that "[i]n these two lines, appellant defines the eyepiece unit as merely the connection between element 1 and element 4 ...." The Examiner thus concludes that no further details are given regarding the function or structure of the eyepiece unit. Appellant respectfully disagrees with all of these positions.

The eyepiece section is disclosed in numerous embodiments and referred to throughout the specification. For example, page 3, lines 2-3 of the specification states that "[t]he endoscope body 1 has an observing optical system and an illuminating optical system." Page 3, lines 7-10 of the specification indicates that "[t]he observing optical system ... is constructed with an objective lens, an image guide or relay lens for

transmitting an image formed by the objective lens, and an eyepiece for observing the transmitted image." This makes it clear that the objective lens of the endoscope forms an image which is transmitted by an image guide or relay lens to an eyepiece from which one observes the image. For example, if one were to place one's eye at the eyepiece, one would be able to observe the image, hence the term "eyepiece." Alternatively, if one were to place a TV camera at the eyepiece, the image could be picked up and processed electronically for image display. (See page 3, line 23 – page 4, line 6 of the current application).

The claims are also clear in this respect. Claims 54 and 61 recite "wherein the TV camera has an image pickup element and said TV camera is optically connected to the eyepiece section of the endoscope to receive an optical image through said eyepiece section." Claim 68 recites "an eyepiece section formed on the holding part and providing an optical connector to attach a TV camera to receive an optical image therethrough ...."

In contrast, element 235 of Hiyama et al. is a signal connector 235 which connects the signal processing circuit 237 and distance computing circuit 238 to the CCD 232 through the signal connector receptor 236 (col. 21, line 67 – col. 22, line 4). Clearly, light incident upon the CCD 232 results in an output electrical signal. Consequently, the signal connector 235 of Hiyama et al. has nothing to do with an eyepiece section, as recited in the claims on appeal.

***D. Overall Connector 211 of Hiyama et al.  
Is Not the Recited Holding Part of the Endoscope***

The Examiner interprets the overall connector 211 disclosed in Hiyama et al. as corresponding to the holding part of the endoscope in the claims on appeal. Appellant respectfully submits there is no basis for such an interpretation in the Hiyama et al.



reference. Hiyama et al. discloses an electronic endoscope 202 that has an inserting section 207 and an operating section 208 (col. 20, lines 33-36). A universal cable 209 extending from a side of the operating section 208 can be detectably connected to the light source processing unit 205 (col. 20, lines 37-42). It should be clear from this disclosure that the inserting section 207 and operating section 208 of the electronic endoscope 202 of Hiyama et al. is connected to external equipment of the apparatus by the universal cable 209 through an overall connector 211. There is no suggestion in Hiyama et al. that a user of the endoscope would, or even could, hold the overall connector 211 while using the electronic endoscope 202. The Examiner has offered no basis provided by Hiyama et al. to support an interpretation of the overall connector 211 as a holding part of an endoscope, as recited in the claims on appeal. Therefore, Appellant respectfully submits that the Examiner's interpretation of the overall connector 211 of Hiyama et al. as corresponding to the recited holding part of the endoscope is inappropriate.

## **V. CONCLUSION**

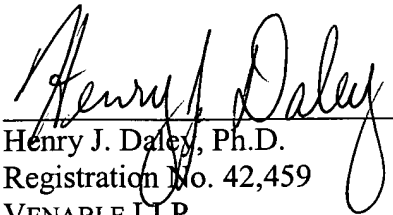
The above arguments emphasize several substantial deficiencies in the disclosure of Hiyama et al. regarding the patentability of the claims on appeal.

Any one of the above noted deficiencies should be sufficient to demonstrate that the Hiyama et al. reference is not relevant to the patentability of the claims on appeal. The initial Appeal Brief provided additional arguments as to why the Hiyama et al.

reference is not relevant to the patentability of the claims on appeal. Appellant thus believes that all claims on appeal are patentable over the references of record.

Respectfully submitted,

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